



# **Waquoit Bay National Estuarine Research Reserve Cultural Needs Assessment**

**Final Report  
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## Executive Summary

The JSI Center for Environmental Health Studies, working in close collaboration with the Education and Outreach Program of the Waquoit Bay National Estuarine Research Reserve (the Reserve), conducted this study to help the Reserve gain a better understanding of how to engage populations living in the watershed area who are not native English speakers in an exchange of mutual learning with the Reserve. The community cultural assessment obtained information about the demographics, beliefs, needs, and interests of recent immigrant populations. The goal was to assist the Reserve to develop a well-targeted program that will better engage underserved populations in the Reserve's activities, both to enrich their lives and to enlist them as stewards of the coastal environment.

According to the NOAA National Ocean Service study "Waquoit Bay National Estuarine Research Reserve Socio-economic Profile" completed in March, 2007, US Census Bureau 2000 data show that 6–8% of the population within the 5 mile band of the Reserve have a primary language other than English. Data from the last three years of the Barnstable County Monitoring the Human Condition Study show that an estimated 2,300 households on Cape Cod do not have an adult who reads, understands and speaks English – about 2.4% of Cape Cod residents. The majority of these populations are Portuguese speakers, originally from Brazil. Other immigrant populations in the area include Latinos, Jamaicans, Russians, and Asians. While we included feedback from diverse residents, due to the higher concentration of Brazilians our assessment primarily focused on this population.

To enhance their services, the Reserve wanted to know how many of these individuals are accessing the Reserve and for what purpose. JSI conducted focus groups and key informant interviews with resident community leaders and service providers to better understand the concerns, cultural assets, and potential barriers that can impact resident protection of watershed resources. Learners from local English Speakers of Other Languages (ESOL) classes were the major source of recruitment for the focus groups.

Even early into the project, our eyes were opened to many new insights and opportunities. Immigrant residents have been enthusiastic in offering support out of a true love for Cape Cod's special environment that is now their home. Several had developed a commitment to environmental protection through the practices they adopted in their countries of origin. Immigrants from many Brazilian communities, for example, are used to extensive recycling programs and are eager to promote greater recycling on the Cape.

### A Sea Change Moment



*"US Census figures tell us that Latino and Brazilian immigrants will soon be a majority, not a minority population. We are eager to prepare ourselves to embrace stewardship of this land that is now our home."*

*-Fausto da Rocha  
Executive Director,  
Brazilian Immigrant Center*

New immigrants; however, like many other Cape Cod residents, may not realize the fragility of Cape Cod's coastal water resources and need information on practices they can use at home and work to safeguard the environment. With target populations often working multiple jobs, the importance of conducting educational outreach at available times and accessible places on topics of most importance to their lives and families has been stressed. Several valuable suggestions were made to make the Reserve itself more inclusive and accessible. In addition to events at the Reserve, programs offered in community settings (such as area churches, the Falmouth Brazilian Coffee Store, ESOL classes, and the Family Service Center) were requested.

Unfortunately, while most participants showed strong interest in the Reserve and support for its goals for environmental education and outreach, it was shared that members of the Cape Cod immigrant community have experienced mounting tensions in recent years, and partially as a consequence some have developed distrust in persons and institutions with whom they are not familiar. The offering of outreach and education services targeted to these communities was seen as highly valuable and the use of trusted community and service leaders to introduce them to the Reserve and its programs was considered an important strategy to overcome many barriers. Several innovative ideas to build environmental peer leadership among youth and adults were proposed.

## Introduction

The JSI Center for Environmental Health Studies, working in close collaboration with the Education and Outreach Program of the Waquoit Bay National Estuarine Research Reserve (the Reserve), conducted this study to improve understanding of how to engage populations living in the watershed area who are not native English speakers in an exchange of mutual learning with the Reserve. The goals of the study, as defined by the Reserve and its Expert Advisory Group, were:

*“To obtain information about the demographics, interests and behaviors of non-English speaking households in the towns surrounding Waquoit Bay National Estuarine Research Reserve. Reserve staff will then use this information to develop a well-targeted program to better engage this underserved population in the Reserve’s activities, both to enrich their lives as well as to enlist them as better stewards of the coastal environment.”*

To enhance their services, the Reserve wanted to know how these underserved populations are accessing the Reserve and for what purpose. Among the specific questions they were seeking to answer were:

1. *What Reserve resources do new immigrant populations use?*
2. *How do their behaviors affect the coastal environment?*
3. *What is the best way to engage this population?*
4. *How can the Reserve support them to become better stewards of the environment?*
5. *What activities do they do for recreation and fellowship?*
6. *Where do people get their information from?*
7. *How do they make their living?*
8. *Who are the leaders in the community?*
9. *What are the barriers to engaging this population, besides language?*
10. *What are the cultures and traditions of this population that if understood, could become components of stewardship efforts?*
11. *What are the communication mediums that these populations rely on the most?*
12. *What is the baseline of coastal environmental knowledge of this population? (in order to develop metrics and to shape messaging)*

Through this study, we were able to obtain information that begins to answer many of these questions. Note that a companion PowerPoint presentation is attached which summarizes findings relating to each of the above questions. In this report, we have organized our findings to emphasize central areas of information gathering and strategic recommendations.



## Methodology

Advancing a social marketing approach, JSI and the Reserve's Education and Outreach Coordinator, Joan Muller, conducted focus groups and key informant interviews with resident community leaders and service providers, including learners and teachers in local English Speakers of Other Languages classes, to better understand the concerns, cultural assets, and potential barriers that can impact resident protection of watershed resources. A literature and data review were also conducted in order to learn from existing research and statistics about demographics, environmentalism as a cultural framework, and useful media outlets and channels of communication. Through the project period, Ms. Muller built on growing collaborative relationships with immigrant leaders and service organizations as she participated in events both at the Reserve and offsite.

### Advisory Groups

Our process was guided by a **Professional Advisory Group (PAG)**, whose members consisted of immigrant service providers, a member of the Commonwealth's Department of Conservation and Recreation Diversity Council, Barnstable County's Data Analyst, and a Town of Falmouth Equity/Affirmative Action Officer (*See member listing, page 28*). The Professional Advisory Group helped define the goals of the study and was convened early in the project to help shape its methodology and share valuable background information about the target community, data sources, and important persons and institutions for key informant interviews.

At the suggestion of the PAG, as the project got underway a second advisory group comprised of key Cape Cod immigrant community leaders was gathered comprised of those representing and serving Brazilian populations. This **Immigrant Leader Advisory Group (ILAG)** met in April of 2008 at the Reserve Boathouse. Participants included eight advanced level III students (Portuguese and Spanish speakers) from the Adult Collaborative of Cape Cod for Education and Support Services (ACCESS) ESOL program and seven service providers, including ACCESS teachers and staff (*See member listing, page 28.*)

### Assessment Tools

The ILAG meeting was an opportunity to gather initial information for the cultural assessment, identify additional individuals for key informant interviews, and to pilot test assessment tools – a focus group script and brief written survey instrument - to ensure that they were culturally and linguistically appropriate. Participants were provided with a \$50 stipend for their time.

### Focus Group Sessions

In May of 2008, two simultaneous focus group sessions were conducted at the Reserve for ACCESS ESOL beginning Level I and beginner/intermediate Level II students from the

nearby Mashpee and Falmouth classes. Members of ESOL classes were selected as a purposive,<sup>1</sup> rather than random sampling, because it allowed us to recruit immigrants with limited language skills who would otherwise be difficult to locate and recruit. While the Reserve is aware that there may be some more isolated non-English speakers in the community who would require different strategies of engagement, ILAG members believed that ESOL learners were typically representative of the majority of recent immigrants because learning English is such a high priority in these communities. They also felt that using ESOL class members would ease discussions because working with trusted liaisons is very important. Participants were provided with dinner in appreciation of their time.

The focus groups were divided into Portuguese speakers (9 participants) and speakers of other foreign languages (Puerto Rico: 2, Russia: 2, Mexico: 1, Turkey: 1, and Vietnam: 1). ESOL teachers were on hand to assist in discussion, and questions were translated into Portuguese and Spanish. Participants completed a brief questionnaire and met together after the sessions to share key recommendations. Survey results were compiled into a data spreadsheet and summarized. Focus group discussions were recorded and immediately written-up and reviewed to identify dominant themes and outlying views.

### Key Informant Interviews

Using a prepared outline of questions, Key Informant Interviews were conducted throughout the project. JSI compiled a list of stakeholder groups and worked with the Reserve to ensure that representatives of each of the important sectors identified were interviewed (see page 28 for listing of Key Informants Interviewed), including:

- Immigrant Service Providers
- Basic Human Service Providers
- Schools
- Resident Leaders
- Religious Institutions
- Healthcare / public health
- Employers; and the
- Media

### Events

While not part of JSI's research, the study benefited from the experiences and contacts made by Ms. Muller as she participated in various events with local immigrant organizations. This included her attending local church services and speaking informally with the ministers and congregations. In July, she organized an event at the Reserve in collaboration with the Barnstable County Human Rights Commission to honor the contributions of immigrants to Cape Cod as part of a Cape-wide human rights awareness initiative.

1 Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.





## Review of Preliminary Findings

Towards the end of the project, the ILAG and PAG members were invited back to the Reserve, along with several Reserve staff and community leaders who were new to the project, to review progress and a PowerPoint of preliminary findings and to help establish next steps for implementation.

## Demographics and Statement of Need

Diversity trainers from the MA Department of Conservation and Recreation have observed that all regions of the Commonwealth have been reporting increased numbers of non-English speaking people visiting the state parks and feel that attention needs to be focused on this issue. According to the NOAA National Ocean Service study "Waquoit Bay National Estuarine Research Reserve Socio-economic Profile" completed in March, 2007, US Census Bureau 2000 data show that 6-8% of the population within the 5 mile band of the Reserve have a primary language other than English. Data from the last three years of the Barnstable County Monitoring the Human Condition Study show that an estimated 2,300 households on Cape Cod do not have an adult who reads, understands and speaks English – about 2.4% of Cape Cod residents. This translates to approximately 7,000 people. The need extends beyond the Cape, and we expect that this project will serve as a model for other reserves.

2006 state statistics indicate that 19% of Massachusetts residents live in a home where the "language spoken at home is not English." According to Warren Smith, Data Analyst for Barnstable County, "While the trend at the State level is clearly upward at about 1.5% - 2% increase per year, at the County level (based upon review of the annual Barnstable County Monitoring the Human Condition Study data), the trend is not entirely clear. The trend is definitely not downward, but the limited data that we have from the Monitoring the Human Condition Study on this topic makes it look rather stable at around 2.5% - 3% of residents. So, it is either increasing slowly, or remaining stable at something less than 3% of the permanent, year-round resident population."

The majority of these populations are Portuguese speakers, originally from Brazil. Other immigrant populations in the watershed area include Jamaicans, Cape Verdeans and other Latinos, as well as a smaller number of Russians, Asians, and other nationalities. The Cape Cod Immigrant Center (CCIC), located in Hyannis but serving the entire Cape Cod area, serves 40-50 Brazilians and other immigrants, including: Lithuanians, Indian, Mexican, Jamaican, Polish, Belarusian, and South Africans. A breakdown of the nationalities of origin for students in the ACCESS ESOL programs on the Cape is attached on page 28. While we included feedback from diverse residents, due to the higher concentration of Brazilians our assessment primarily focused on this population. Brazilians first immigrated from Minas Gerais, and more recently from Parana; mostly from farms.



Barnstable County estimates approximately 10,000 Brazilians living on Cape Cod, including those who do speak English well. They note that surveys under-identify Brazilians for many reasons, including that Brazilians are not “Hispanic” and may not identify as either black or white, categories frequently used by U.S. demographers. The Brazilian Immigrant Center estimates 14,000 Brazilians on the Cape. The population seems to be growing more than is shown in the County statistics. Key informants have recently observed that many are going back to home countries due to increasing anti-immigrant hostilities and because the dollar is weakening. Yet; providers are still very busy seeing those needing services. According to Ingrid Muzy Murray of the Cape Cod Immigrant Center (CCIC) and Cape Cod Hospital, 20% of hospital ER admissions in Hyannis are Brazilians. More locally, the Falmouth Service Center provides food to approximately 50-70, mostly Brazilian, immigrant households a month. The Falmouth affirmative action officer noted the schools have approximately 7% overall minorities and 1% new immigrant students.

According to County research staff, surveys indicate that immigrants’ education is, on average, higher than other Cape Cod residents, but there is a wide range of educational attainment across the immigrant population. Many come from highly professional backgrounds, while others immigrate without having had access to many years of formal education in Brazil. Educational opportunities, especially the chance to learn English and to advance their children’s education, were noted by participants to be one of the motivations for coming to the United States.

Of ESOL student participants recruited for the ILAG and focus groups, occupations reflected many of the typical occupations identified by key informants for non-professional recent immigrants. Professional occupations, while common among the Cape Cod immigrant population, were under-represented because participants with limited English were selected for the study.

Additional Occupations among immigrant participants including advisors and key informants were: health advocates, social workers, ESOL staff, secretary, notary public, translator, student, and stay at home mother. Participants noted the following occupations as being common for immigrants on the Cape: Landscaping, construction, painting, home repair, cleaning, restaurant staff, hotel staff, au pairs, informal daycare, grocery store workers, and marine and auto repair; while advisors also noted that many are researchers, lawyers, and doctors or held more professional occupations in their home country.

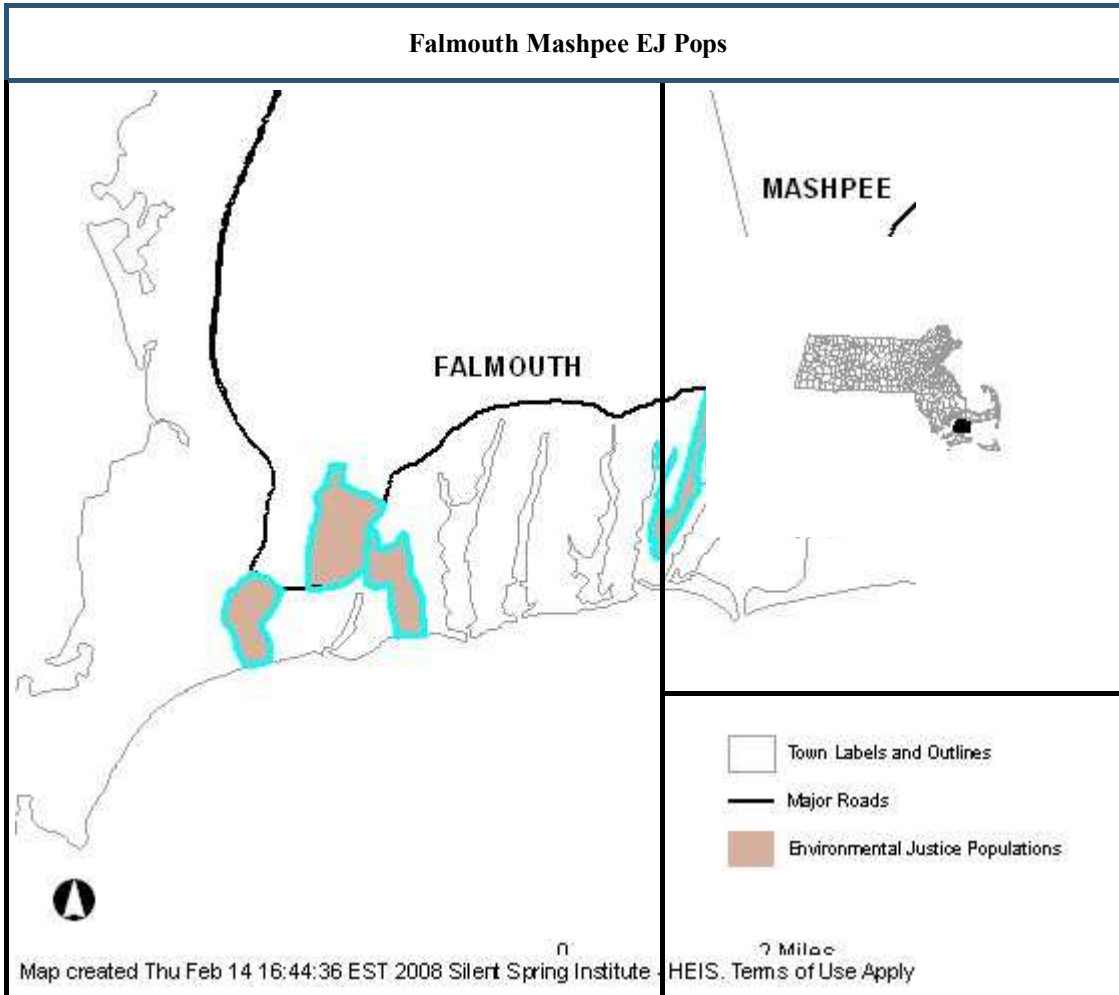
Occupation (multiple listed)	Number in Focus Group
Painters	5
Cleaners	4
Cook, other restaurant work	3
Carpenter	2
Carpet installation	1
Tiler	1
Nurses Aide	1
Medical interpreter	1
Landscaper	1
Golf course maintenance	1
Country Club Staff (Willowbend)	1
Baby sitter/ Au Pair	1



# Environmental Justice Populations<sup>2</sup>

## Map Data

Waquoit Bay  
National Estuarine  
Research Reserve  
Cultural Needs Assessment  
December 2008



<sup>2</sup> **Map Source:** Silent Spring MA Health and Environment Information System, [www.silentspring.org](http://www.silentspring.org)

Polygons in the Environmental Justice (EJ) Populations layer represent neighborhoods across the state with high minority, non-English speaking, low-income, and foreign-born populations. Data in this layer were derived from Summary File 3 at the blockgroup level (Summary Level 150) from 2000 U.S. Census data). Such areas are the focus of Executive Office of Environmental Affairs's EJ Policy, which was developed to use state resources to ensure that EJ populations receive a strong voice in environmental decision-making. This data originates from MassGIS as part of the Executive Office of Environmental Affairs.

REC	FID	AREA	ACRES	TOTAL POP	SAMPLE POP	FOREIGN BORN (%)	INCOME	MINORITY (%)	ENGLISH SPOKEN at HOME (%)
<a href="#">1</a>	16	717314.3833	177.252	591	602	6.81000	28,289	14.45000	97.18000
<a href="#">2</a>	17	1502009.8524	371.153	985	975	8.00000	27,067	10.46000	100.00000
<a href="#">3</a>	18	892228.2775	220.474	458	371	1.08000	28,971	9.16000	94.94000

## Cultural Assets Identified by the Assessment:

### Participant Variations

It is important to note that, as with all focus groups, the themes reported in our results are not generalizable to everyone in the target populations. Within the focus groups, there was variation. Partially, this variation seemed to be between Brazilian immigrants, and other immigrants; although we had too few of the latter to make specific cultural comparisons. There was also variability in occupations and socio-economic demographics.

### Environmentalism Expressed

Participants were, with only few exceptions, very enthusiastic about the Reserve and the initiative to engage immigrant communities in education and outreach, and were ready and willing to help address environmental issues. One of the Immigrant Leader Advisors, after discussing concerns during the session, took action on her own to contact a contractor she had used and inform him that he should not be disposing of painting solvents on the ground. Common themes which arose were:

- Love of nature
- Appreciation for the beauty of Cape Cod
- Familiarity (among Brazilians) and desire for recycling
- Interest in gardening and landscaping (including using native species)
- Concern regarding pollution
- Strong desire to protect the environment among many

One might expect those struggling to survive economically, understandably, not to voice environmental concerns. Nevertheless, more often than not, they did express environmental concerns. Of course, individuals vary as well. Many participants felt very strongly committed to environmental stewardship in a very large sense, a few wanted simply to know and obey the law, while several were particularly concerned about how pollution or poor working or living conditions may affect their health. While many felt eager to take action, not everyone was able to see themselves in positions to effect change.

In reviewing preliminary findings with advisors, it was noted that perceptions also are in flux as environmental awareness is changing. The Reserve is fortunate to have Jamaican immigrant, Tonna-Marie Rogers, on staff as their Coastal Training Program Coordinator, who observed to JSI:

*"Jamaica has gone through a transition. Due to the growth of an environmental movement, environmental awareness is stronger and environmental protection is an important national issue compared to two decades ago. However, this might not be expressed as a formality among some Jamaicans. For example, although the ocean is seen as an important resource, the general public might not refer to the formal label of 'environmental protection' per se, though environmental resources such as the ocean are valued and protected."*

## Cultural Strengths

Family and civic duty were stressed as a high priority. Reserve events which emphasize education and outreach for whole families including children were particularly recommended.

Committed religious practice among many Brazilian immigrants appeared to be a strong organizing and motivating factor. It may be noted that while the literature review uncovered Brazilian religions which emphasize a spiritual relationship with the ocean and other aspects of nature (including large annual events that are still held in some Brazilian communities on the shoreline to honor the ocean), participants advised that many Brazilians who practice Christianity are not comfortable with these more traditional spiritual practices.

Appreciation and skills in cultural arts were noted. Theater was mentioned by a key informant, and verified by advisors, as often being used for educational outreach in Brazil and in Massachusetts for educational outreach with Brazilian audiences. Many expressed that music and food were important draws for events.

## Interests and activities

Activities immigrants commonly engage in that participants identified:

### Dominant Themes:

- Learning English is a high priority
- Attending church events
- Going to the local Brazilian Coffee Store Market (72 Davis Straits, Falmouth); and larger Brazilian shopping centers near Hyannis

### Also Mentioned:

- Fishing/shellfishing is common
- Going to the beach occasionally
- Barbeques and picnics
- Participating in sports leagues (Brazilian & Jamaican soccer) and going to sports bars
- Volleyball at people's homes
- Attending cultural fairs
  - Harum Day in Woods Hole in February; sponsored by the Woods Hole Multicultural Committee
  - Annual multicultural festival at Cape Cod Community college, usually in March
  - Cape Verdean Festival in East Falmouth
- Coonamessett Farm in the Hatchville section of Falmouth has food, music, and dance that originated with Jamaican workers (but is not specifically for Jamaicans) on Fridays during the summer; the farm also held a Brazilian night.

*Remarks from  
Brazilian  
key informants:*

*"[Pufferbellies is]  
definitely the place  
for Brazilians and  
other immigrants  
to socialize."*

Greater participation in community activities was noted among those living in the Hyannis area. Young people mentioned going out to social dance clubs; in particular, Pufferbellies in Hyannis.

Church events were among the most common activities. The Cape Cod Immigrant Center (CCIC) estimates that there are 15-20 churches on the Cape serving these populations. Churches in the WBNERR service area include: Church of Nazrene, on Brick Kiln Road; Saint Anthony's Roman Catholic church; and the Pentacostal church (a Puerto Rican minister from this church interns at the Falmouth Service Center). Key informants noted that Evangelical denominations are growing to surpass Roman Catholics.

## **Barriers Identified by the Assessment:**

### **Resources, free time, and transportation are often very limited.**

Many tend to work 2 or more jobs; especially in the summer, leaving little time and energy for participating in environmental education programs. The owner of the Falmouth market, the Brazilian Coffee Store, echoed some of the other participants comments that the Brazilians in the area tend to stay home and only occasionally visit family and (less often) friends. Focus group participants noted that many do not own cars (which they also noted, with humor, helps them save energy). The Reserve is on an accessible main bus line. Van transportation was recommended by a key informant to bring groups from further away.

### **Use of the Reserve Resources is Rare**

Only 2 ESOL students (one a Level III student in the ILAG) had been to the Reserve. None had been to the Visitor Center or to a Reserve event. The Mashpee student had been to the Bay itself (and the South Cape Beach State Park area of the Reserve), The Level III student from Hyannis had been to the beach, the bay, and Quashnet Trail. 4 of 7 Professional Advisors had been to the Reserve; all going to the Visitors Center and 3 attending a Reserve event. While it is unclear from the survey the nature of the event, a teacher training had been held previously for ESOL teachers.

- Major barriers to coming to the Reserve and using its resources were:
- Only about 1/3 knew where it was
- Majority didn't know what it was
- Didn't know that it was for the public
- Name implies for researchers only
- Signage doesn't adequately explain who is welcome when and for what activities
- Entrance seems restrictive; they hadn't felt welcome
- Not open on weekend (except events)
- Key informants shared that Brazilian residents don't tend to go to many public, recreational institutions

- Very limited time and resources
- Mistrust among many of institutions they aren't familiar with
- Many prefer to socialize within their own cultural community in their language of preference.

## Language

Ingrid Muzy Murray notes that English speaking abilities are generally good among immigrants and that they mostly need interpreters for more complex information, such as health-care. Yet participants noted that Brazilian and Spanish-speaking immigrants may prefer information from the Reserve be given in their own language, in order to be welcoming and more easily understood.

## Growth in Anti-Immigrant Sentiments

Unfortunately, participants noted that members of the Cape immigrant community have experienced mounting tensions in recent years from non-immigrant residents and/or authorities. Such experiences were even reported by several of the professional key informants who had lived on the Cape for many years, spoke fluent English, and had acquired U.S. citizenship. They believe it has worsened since September 11, 2001, as has been documented in other parts of the country.<sup>3</sup> Partially as a consequence, some have developed a certain level of distrust in persons and institutions with whom they are not familiar. It was noted that those residents who have not yet attained full legal immigration status are particularly cautious in this regard. This unfortunate reality appears to be hampering community-building in regions of Cape Cod, including to some extent the Upper Cape area. A shooting, by a police officer, of an undocumented Brazilian painter after a car chase in Hyannis during July 27, 2008 - during the study period, escalated tensions. This may have impacted the participants' sentiments; however, feelings of tension had been noted as mounting prior to the incident as well. Due to incidents and hostile experiences, one key informant from Falmouth noted that:

***"We tend to stay to ourselves, just as you stay to yourselves."***

However, it also deserves mentioning that such a response was an outlier to the study, with most participants expressing a desire to connect with Reserve's outreach and education programs. It may be that our use of ACCESS students (introduced to the Reserve as a group, through their teachers) led to an unusual level of comfort and trust, or that distrust is not a strong factor regarding an environmental institution. Certainly many of the key informants and participants were working hard to build community as Cape Cod residents and very much appreciated the Reserve's efforts to reach out.

<sup>3</sup> Sen, Rinku and Fekkak Mamdouh. *The Accidental American: Immigration and Citizenship in the Age of Globalization*. September 2008.



*Concerned Voices  
about Impacts  
to the Watershed  
Environment:*

*"The common  
ground is the  
common  
ground!"*

*"In Brazil, there  
is recycling  
everywhere!"*

*"You don't see  
many doing  
recycling here.  
In Brazil there's  
a lot of  
publicity."*

*"We should  
make it more of  
a two-way  
exchange.  
There's a lot to  
learn from all  
cultures. Brazil is  
probably the  
most environ-  
mental country  
in the world."*

*- Stewardship  
Coordinator at  
the Reserve*

## Concerns Voiced About Impacts to the Watershed Environment:

When prompted to discuss any observations or concerns about any specific ways members of the study population may be impacting the environment, the following were noted:

- **Littering** was thought to be too common on Cape Cod by immigrants and non-immigrants (one key informant noted that it is more acceptable to informally throw away trash by the road in Brazil). However, many of the participants expressed keen interest in recycling and mentioned that recycling is more prevalent in Brazil. This apparent contradiction may stem from differing recycling practices across Brazilian communities of origin. A key informant noted that recycling is less among immigrants because there is not as much publicity here. The World Revival Church in Falmouth just started a recycling program.
- **Other improper waste disposal** was noted and of great concern. A long discussion arose about immigrant contractors disposing of solvents directly on the ground. As immigrants are less frequently the owners of businesses, with little control over practices, it was stressed that employers need to adopt proper procedures and train workers. Since business ownership is a goal for many immigrants, several participants thought that trainings which increased contractor familiarity with environmental practices could be of interest in helping them promote their businesses to Cape Cod clients who are environmentally conscious.
- **Severe overcrowding of homes**, necessitated for some immigrants who are struggling hard to make ends meet, was hypothesized by a few to have a potential impact on septic systems. It was further noted that these immigrants are largely renters and do not have good control over many environmental practices, such as home energy efficiency and septic system upkeep. Overcrowding may be expected to worsen. According to the Brazilian Immigrant Center, as many as 50-60% Brazilians in Massachusetts are losing their homes in the current economic crises.
- **Occupational practices** were often expressed as areas of concern and it was emphasized that employers were mostly in charge of these practices and product use. Of particular concern both for the environment and for worker health were:
  - Fertilizer and pesticide use among landscapers and golf courses
  - Marina cleaning and repair
  - Products and disposal practices related to construction, building repair, and painting.
  - Cleaning products used by cleaners of homes, hotels, and other commercial establishments.
  - Factory pollution
  - Nuclear radiation





## Strategies for Engagement

### Suggestions to Improve Use of the Reserve:

The importance of introducing new persons to the Reserve through trusted liaisons was stressed repeatedly. Participants who had been brought to the Reserve through the ACCESS ESOL classes were very pleased with the site and looked forward to returning. Strongly suggested times of greatest availability are Sunday afternoons in the fall, after the summer work season has tapered off.

- Improve entrance gate and wall to appear more welcoming and make signage to clarify the Reserve's mission and hours of operation
- Introduce people to the beauty of the Reserve
- Hold cultural events onsite:
  - Include multicultural music and food
  - Host the yearly Falmouth School Cultural Club Potluck
  - Advisors thought that the immigrant appreciation event held this past summer, in collaboration with the Barnstable County Human Rights Commission, would be valuable to hold again, this time with more advanced planning in collaboration with local immigrants
- Hold other community workshops of high interest at the Reserve or offsite (*see suggestions to improve stewardship below*):
- Invite target audiences to special events, as well as regular activities, at the Reserve; particularly:
  - Evenings on the bluff or a daytime watershed block party (cultural food and music are a particular draw and can build community)
  - Children's' discoveries and other youth education
  - Activities such as fishing, shell fishing, and visiting the beach were noted as particularly enjoyable
- Enlist volunteer and/or paid staff as interpreters and outreach liaisons
- Consider how limited time and transportation can be obstacles

*Quote from participants and the Brazilian Immigrant Center*

### Suggestions to Improve Stewardship

The assessment highlights some of the great value that Cape Cod residents from diverse linguistic and cultural backgrounds can bring to advancing the Reserve's mission. The Reserve is eager to engage these residents and their service, employer, and cultural organizations more fully in enhancing environmental education and outreach programs and as partners in promoting environmental stewardship among all Cape Cod residents to protect the watershed.

Participants in the assessment offered many ideas to promote greater learning and stewardship in the watershed. At a more active level, resident participants were interested in working with the Reserve to improve policies; especially to improve town recycling services and rates.

*Remarks from  
Brazilian  
key informants:*

*“In Brazil, they  
don’t have septic  
systems...  
...They learn they  
exist when they  
buy a house in  
Massachusetts.”*

*“Most Brazilians  
don’t drink tap  
water.  
That it is safe to  
drink the water is  
a hard sell.”*

*“Assume that very  
few (20% at most)  
would know  
about what is  
groundwater.”*

*“They don’t know  
how the wastewa-  
ter system works,  
how it affects  
fish... [or] the im-  
pacts of fertilizers  
on water.”*

*“In Brazil there  
are messages  
about water  
conservation  
every day. One  
needs strong  
messages from  
the government.”*

Cape health, literacy, and social service organizations were interested in developing environmental leadership programs for those they serve. The Brazilian Immigrant Center, while based in the Boston area, conducts successful initiatives to promote occupational and environmental health in diverse areas of the Commonwealth and was interested in supporting projects on Cape Cod, such as conducting one of their workshops for healthy cleaning services as part of the Reserve’s education and outreach programs. Several area churches were very welcoming of engaging parishioners and hosting events with the Reserve.

Existing Reserve education and outreach topics around coastal education, energy conservation, ecological landscaping, and septic system impacts were described to participants. A number of suggestions were made for the Reserve in conducting outreach and education to target audiences, including:

**Invite target populations as workshop and event speakers to teach non-immigrant residents**

- Brazilians, for example, could teach reserve visitors about recycling or rainforests in Brazil
- Brazilian service organizations could host workshops

**Successful Training Design for Immigrant Audiences**

- Tailor to the specific concerns of Brazilian and other target audiences, including environmental interests and to improve their livelihoods and lifestyle (as discussed in this assessment and specified below under recommended topics and key messages)
- Hold educational workshops at a basic level for those with little prior knowledge
- Offer training in their language (while preferable, several indicated that it is not always necessary). The World Revival Church uses 4-5 headsets with youth translating. The Reserve could buy some for their events and hikes (they find ear headphones work best)
- Use culturally and linguistically appropriate training materials (when appropriate, consider literacy levels as well as language)
- Use educators from the target community when possible
- It was expressed by some Brazilians who do outreach that certain messages work best when they are emphasized as the law, rather than as voluntary

**Recommended Topics and Key Messages**

Existing Waquoit Workshops—adapted, if needed, to use plain language and at a basic level—to educate homeowners about wastewater and septic system care, energy efficiency, the Bay, and the environmental impacts of fertilizer were generally desired and thought to be useful for others.



*Remarks from  
Brazilian  
key informants:*

*"How to save  
energy & oil...  
Everyone would!"  
-Pastor Robson on  
recommendations for  
energy conservation  
workshops*

*"They need a lot of  
education about  
energy. Unfortunately  
a lot of Brazilian  
immigrants have a  
low education; they  
come from the  
countryside. Even  
those with higher  
education don't have  
information about  
green issues."  
-Brazilian Immigrant  
Center, hosts environ-  
mental trainings*

**Water and wastewater:** Participants expressed concern about septic systems after it was discussed in introductions to the focus group sessions as a concern of the Reserve. Few expressed much baseline knowledge of these issues and how they might affect Waquoit Bay watershed. Some were concerned about water pollution from factories and pharmaceuticals disposed of at home, as these were topics that had recently been in the news and were covered in ESOL classes. It was suggested to include basic information about septic systems, drinking water, groundwater, and water conservation.

**Energy conservation workshops:** Consensus was that generally everyone wants to save energy to save money (and for some, the environment), but few have taken many actions. Energy conservation workshops were expressed to be of great interest, including as a means to:

- Stay warmer
- Keep air moister (so heating doesn't aggravate asthma and other respiratory conditions)
- Save money (if savings accrue to them, which may not be the case for some renters).

**Occupationally-related workshops** are of interest, but it was expressed that workshops tailored to occupation should:

- Work with employers of immigrants, as they have decision-making authority; immigrants rarely felt workers could affect changes to workplace practices without employer mandates
- Focus on benefits of environmental practices to their businesses
- Address worker health concerns
- Help immigrants build their business opportunities: a good partner is the Brazilian Immigrant Center, which conducts occupational/environmental health trainings
- Be conducted at workplaces, if possible.

Interest was greatest for the following **occupational workshops**:

- Cape Cod landscaping was considered a particularly good focus; one participant suggested holding a landscaping fair
- Cleaners: The Brazilian Immigrant Center suggested a model, whereby they could hold a workshop about Vida Verde, a Brazilian Women's environmentally-sound cleaning cooperative in Somerville, MA
- Environmentally friendly construction/home maintenance. The Brazilian Immigrant Center is also offering health and safety trainings for these workers, and JSI is working on a collaboration to build health and safety leadership among Hispanic construction workers in other parts of the state.
- Boat cleaning, repair, and maintenance at marinas were thought to be another common occupation where workplace practices may particularly impact the bay environment

*Remarks from  
Brazilian  
key informants:*

*"Few have been  
trained in safety and  
health. Very few use  
safety equipment."*

*"A law should be  
passed requiring  
education of  
employees."*

<sup>4</sup> Resource: [Immi-grants and the Mas-sachusetts Health-Care Workforce](#) by Marcia Hohn, The Immigrant Learning Center Inc. Health-care job openings are growing twice as fast as the average for all industries in Massachusetts, and immigrants are eager to acquire health-industry skills. The author describes local training programs and recommends immigrant-friendly improvements.

<sup>5</sup> Resource: The New Entry Sustainable Farming Project (NESFP) is a Massachusetts non-profit partnership that assists immigrants and others with agricultural experience to apply their skills in their new environment and become commercial farmers.

- Healthcare workers at the Mashpee Community Health Center (Milleni Kuvatu, whom we met through the Cape Cod Immigrant Center, is a social worker there) and at Falmouth Hospital – Cape Cod Healthcare.<sup>4</sup>
- Farmers - It was noted that the Coonamessett farm in East Falmouth, with its sizeable Jamaican workforce, focus on environmental sustainability, and multi-cultural events, may be a good partner.<sup>5</sup>
- Conducting education for families (inclusive of a range of ages) at the Falmouth Service Center (FSC) food bank (or at the "town dump" where people congregate) tailored to what would help them meet their needs, was recommended by local key informant service providers Brenda Swain, Executive Director of the FSC, and Brother George Spivey, Town of Falmouth Equity/Affirmative Action Officer. Topics most likely of interest were
  - Weatherizing (consider providing free/low-cost weatherization materials to distribute)
  - Natural landscaping and gardening on Cape Cod (including native plants, gardening with little topsoil, and the impact of chemicals on the environment)
  - Integrating the Reserve's workshops into the FSC's educational programs (can integrate with their organic garden)
  - Youth education (Wednesday nights) would be valuable and helpful to parents as a way of engaging children fruitfully while parents obtain supplies.
- Additional community workshop topics: Several emphasized the importance to teach, "the reason why environmental protection is important!" Other topics of interest included recycling and trash disposal, "natural" cleaning products, cooking, and gardening.
- Enhance education for children – It was frequently stated that educational enrichment for children is a major reason why parents may have moved to the United States.
  - Learning about animals may be an enjoyable topic for younger children
  - Green jobs and environmental restoration may be good topics for older students
  - Hold school classes, and target language and cultural clubs at schools
  - Organize games and/or a competition with children, as is done in Brazil
  - WB NERR Summer Camp – the Reserve has offered scholarships for Summer camp programs to neighboring youth, but attendance was poor. Participants noted that working parents may have difficulty having children in a program that was not offering a full day of care
  - Advertise science school and other children's activities in Portuguese or Spanish, even if the program is in English; the parents might not speak English even if the children do
- Educate landlords (including boarding houses) who have immigrant tenants





about septic systems maintenance, impacts of overcrowded housing, and reasons to improve energy conservation.

## Develop Culturally and Linguistically Tailored Materials

Note that it may prove useful to continue to involve members of the target audience in the preparation of materials. "This involvement not only helps to ensure that materials will be appropriate for the target audience, but helps to create ownership. At the same time, these individuals are acquiring knowledge, new skills, and self-esteem."<sup>6</sup> Requested material development included:

- Translate Reserve map, brochure, and some simple environmental outreach materials. Keeping information simple and readable may be more important than language translation. However, some did see having materials in other languages as valuable.
- Create new guidance for new residents with clear information on laws, regulations, and important environmental practices (as RefletirNews is doing for the city of Everett). It was suggested that this information be straightforward and directive for those who want to know what the laws and regulations are and how to comply.
- Flyers for homeowners, including where to find environmentally-conscious services.

## Leadership Development

Developing leadership, such as training immigrant community leaders to perform outreach directly to the community, rather than having residents just come in for workshops, was posed as a particularly effective and far-reaching strategy. Such strategies have been noted as best practices in community-based, participatory research literature for advancing health, environmental health, and occupational health outcomes.<sup>7</sup>

Develop Environmental Leadership program in collaboration with ACCCESS to train leaders in the community on environmental issues and skills such as how to engage in the town meeting process. The core participants in this program would be the members of the Immigrant Leader Advisory Group.

- Provide sessions on energy efficiency, organic gardening, and septic systems to ACCCESS classes. As noted, learning English is a high priority for most new immigrants.
- Develop Cape Cod Immigrant Center Leadership program tailored to support WB NERR education and outreach programs (provide a session for their leadership class).
- Generally recruit volunteers who are immigrants for the Reserve.
- Develop teen leadership program with Falmouth High School youth (key informants Brother George Spivey and Brenda Swain suggested that the school's Portuguese American Club or Lower and Outer Cape Community Coalition may be good resources for such efforts. Partner with science and language teachers and children/family guidance counselors). Incorporate competitions.
- Consider summer internships for bilingual teens modeled on Bay Team explorations

### Remarks from Brazilian key informants:

*"Usually the owner of the company chooses—that's why it's important to educate both customers and companies."*

*-BIC*

*"Landscapers [and families] use chemicals all the time. I only know one landscaper in Massachusetts who uses safer products. He comes from an area with more awareness."*

*"We need to find ways to bring kids together: use kids to build relations."*

<sup>6</sup> SAMSA, Social Marketing And Health Communications, <http://preventiontraining.samhsa.gov/THEORY/communications.htm>. Accessed Fall 2008.

<sup>7</sup> Latowsky, Gretchen, "Research in Lawrence, Massachusetts, Flags Environmental Health Hazards and Fuels Education and Action." Science Communication, Vol. XX No. X, Month 2003, pp 1-5.



*“Approach from  
all sides. Use all  
different ways [to  
communicate].  
Then you will see  
results”*

<sup>8</sup> Rogers, E. *Diffusion of Innovations*. 3rd ed. New York: The Free Press, 1983.

<sup>9</sup> SAMSA, *Social Marketing And Health Communications*, <http://preventiontraining.samhsa.gov/THEORY/communications.htm>. Accessed Fall 2008

of the Bay. Invite students who are attending high school summer classes to the Reserve. Note that teens have to work in the Summers which limits their ability for unpaid outreach. One key informant cautioned that engaging youth in outreach may be hard because some of the children don't like to speak Portuguese and do activities with their immigrant community. However, the Assembly of God church uses youth as Portuguese/English interpreters for services.

- Partner with religious leaders to conduct outreach in churches (speak at the church, post to bulletin boards, distribute educational materials, offer church outings/picnics at the Reserve). CCIC estimates 15-20 churches on the Cape serving immigrant populations. The Brazilian Immigrant Center estimates that 25% of immigrants go to church. Locally, these include: Falmouth Church of the Nazarene (Protestant); Saint Anthony's Parish (Roman Catholic); the Pentecostal Church (Brenda Swain has a contact through her student with their Puerto Rican minister); & the Evangelical Church (a growing religious affiliation for Brazilians.) It was noted for event planning that Brazilians do not drink alcohol.

### Communication Channels

Social marketing applies methods and tools developed for commercial marketing to social issues. JSI's *Social Marketing Toolkit*, adapted for the Reserve to promote education and outreach to recent immigrant audiences, accompanies this report. The findings from this WBNERR Cultural Needs Assessment can support the Reserve in developing communications and marketing plans for social marketing campaigns. The following is helpful information learned through the assessment about the communication channels and media outlets that may be most effective.

### Social Networks

Social systems have long been recognized to be a productive means of spreading messages, ideas and strategies that promote social causes. These ideas may be diffused in a community by means of certain channels of communication.<sup>8</sup>

*“The social system acts as a kind of collective learning system in which early adopters of an innovation transmit their experiences through interpersonal networks.”<sup>9</sup>*

Participants of the assessment frequently emphasized that it is better to go through trusted community leaders or service providers first, to build relationships using existing social networks. While word of mouth was suggested as being very effective, it may be easier in some neighborhoods, including the more populated neighborhoods of Hyannis, while people in communities nearer the Reserve are less connected to one another and consequently may require more intensive outreach. The engagement of adult and youth community leaders, as detailed above (see Leadership Development) was often suggested as the potentially most effective channel of communication.

On the next page are suggested locations that can offer good message credibility, reach, frequency for seeing or hearing messages, and potential impact, while being cost effective.





### *Multicultural Events*

- Participate in Harum Day held the last Thursday every February in Woods Hole
- Participate in multicultural fair at Cape Cod Community College, generally held in March.
- Host yearly Cultural Awareness Club at Morse Pond School Potluck – mostly for Cape Verdeans
- East Falmouth Coonamessett Farm: Friday has a Jamaican grill with food, music, and dance, and it used to have a Brazilian night.
- Immigrant appreciation days, such as the one the Reserve sponsored last summer.

### *Postings*

- Post colorful announcements of events or educational materials on:
- Social service providers, such as the Falmouth Service Center (as well as Community Action and Catholic Charities in Hyannis),
- Falmouth Brazilian store, and
- Health bulletin boards, such as at the Community Health Center of Cape Cod in Mashpee and Falmouth Hospital
- One participant recommended providing incentive coupons with rewards from local businesses for taking an environmental action such as attending events or purchasing environmentally-friendly products.
- While not arising in discussions, when asked, advisors noted that text messaging is common and could be used to spread messages or news of events.
- Portuguese Internet websites were mentioned as another vehicle for posting as well as in local and regional newspapers (see Media Channels, pp. 22-24, for specifics)

### *Community Outreach Sites* (See also: Suggestions to Improve Stewardship, p.15 )

- Set up table outside the Falmouth Brazilian Coffee Store , “A hub of information” and at the larger Hyannis Brazilian shopping center, Intercontinental.
- Organize at soccer events and/or sports bars
- Announce events and/or integrate learning through ESOL classes
- Inform churches and participate in church events
- Conduct at social service (Falmouth Service Center) and healthcare sites. Key informants from these sites said they would spread the word of events.
- The Farmers Market at Peg Noonan Park, Main Street was a potential gathering spot mentioned by the Brazilian Coffee Store owner.
- The Falmouth Waste Management Facility (“town dump”) swap shop would be a good location to distribute materials or otherwise make information available

## Media Channels

### *Magazines and Newspapers:*

- Bate Papo, magazine, TV show, and Internet Site for Portuguese speakers was recommended by the Brazilian Immigrant Center (BIC) and advisors were familiar with it. Editor & Publisher: Shirley Nigri Farber 781-975-1009.
- Local Portuguese newspapers were recommended. The following were found free at the Intercontinental Brazilian Market in Hyannis. None were distributed locally in the Falmouth/Mashpee area, but RefletirNews, whose Editor participated as a Key Informant (and recommended by the BIC), said they would add Falmouth to their stops. 706 Mystic Ave, Somerville, MA 02145, 617-625-4598, [refletir.news@gmail.com](mailto:refletir.news@gmail.com)
- Cape Codder had a “To Your Health” supplement for Brazilians in Portuguese with a Resource Directory and Calendar; however, advisors said that it may no longer be printed. Larry Fox [larryfox@rcn.com](mailto:larryfox@rcn.com), Mail listings to: P.O. Box 918, Dennis, MA 02630. [www.toyourhealth.com](http://www.toyourhealth.com)
- A Noticia (Portuguese weekly recommended by the BIC), Carlos Moraes • 781-322-0096, 214 Commercial Street, Suite 204, Malden, MA 02148 [metropolitan-news@parkear.com](mailto:metropolitan-news@parkear.com) | <http://www.parkear.com> and Metropolitan News (events/classifieds) [metropolitannews@parkear.com](mailto:metropolitannews@parkear.com) | [www.parkear.com/](http://www.parkear.com/)
- A Semana (Portuguese weekly recommended by the BIC) Claudio Santos • 617-354-2299, 705 Cambridge Street, Cambridge, MA 02141, [asemana@hotmail.com](mailto:asemana@hotmail.com) | [www.jornalasemana.com](http://www.jornalasemana.com) Brazilian Extra (lifestyle supplement) [brazilianextra@hotmail.com](mailto:brazilianextra@hotmail.com) | [www.brazilianextra.com](http://www.brazilianextra.com)
- Brazil Times newspaper (recommended by several key informants): P.O. Box 447, Somerville, MA 02143, (617) 625-5559. information: [br@braziliantimes.com](mailto:br@braziliantimes.com); news: [news@braziliantimes.com](mailto:news@braziliantimes.com) opinion: [op@braziliantimes.com](mailto:op@braziliantimes.com); marketing: [ad@braziliantimes.com](mailto:ad@braziliantimes.com)

### *In addition, the following newspapers and magazines cover events in Massachusetts:*

- *O Journal* was recommended by a Cape Cod key informant (weekly, Portuguese: Brazilian and Cape Verdean audiences) Ric Olivera, 10 Purchase St., Fall River MA 02722 | [www.ojornal.com](http://www.ojornal.com) Main 508-678-3844, News Ext- 16 also operates El Latino Expresso below. Ric Olivera, publisher [ric@ojornal.com](mailto:ric@ojornal.com).
- *ReMetropolitan News* and possibly the *Journal de Sport* were additional newspapers recommended by the BIC (However, note that the Center is in the Boston area, and these weren't observed on the Cape).
- *Brazuca* (MA) Fernanda Garcia • 617-381-0066, 449 Broadway, Everett MA Newspaper and Webtv [brazucanet@yahoo.com](mailto:brazucanet@yahoo.com) | [www.brazucatv.com](http://www.brazucatv.com)
- *Brazilian Voice* (covers MA) Roberto Lima • 973-491-6200, 412 Chesnut St. Newark NJ [info@brazilianvoice.com](mailto:info@brazilianvoice.com) | [www.brazilianvoice.com](http://www.brazilianvoice.com)

*Spanish newspapers are also delivered free in Massachusetts, including*

- *El Planeta* (Spanish weekly) • [www.elplaneta.com](http://www.elplaneta.com)
- *El Latino Expreso* • [www.neexpreso.com](http://www.neexpreso.com)
- *La Semana* (Spanish Weekly) • [www.lasemanawceatv.com](http://www.lasemanawceatv.com)
- *Siglo 21* (Spanish weekly) • [www.siglo21.com](http://www.siglo21.com)
- Participants also noted reading local English newspapers, such as the *Cape Cod Times*, *The Mashpee Enterprise*, *The Falmouth Enterprise*, and *Falmouth Bulletin* (Few often read the Barnstable paper).

#### *Internet and New Media:*

Portuguese websites were suggested for posting events and placing a link to the Reserve website.<sup>9</sup> Few specific websites were recommended in focus groups, but, as noted in their entries, several of the newspapers, TV, and radio shows also have websites. Many websites have blogs and other interactive features.

- BISADO.com which lists events; was recommended by RefletirNews
- The Brazilian portal to the U.S. ([www.tiosam.net](http://www.tiosam.net)) was recommended by an immigrant leader
- The Massachusetts Alliance of Portuguese Speakers (MAPS) has a website and helpful organizational links: [www.maps-inc.org](http://www.maps-inc.org)
- Text messaging is common and has been used as the basis for public health social marketing campaigns, especially to reach the young.

#### *Television:*

While Portuguese and Spanish cable shows were recommended, few specific channels or programs were identified.

- *TV Globo* (Portuguese) is among the largest channels in Brazil and was observed to be playing in at a Brazilian restaurant in Yarmouth and in Somerville Brazilian markets and cafes. Available in the U.S. from Dish Network, Direct TV, and Comcast. Recommended by RefletirNews.
- *Record International* on Dish Network, was also recommended by RefletirNews.
- Channel 17 hosts the “Bate Papo with Shirley” show on Saturdays at 4pm for Cape Cod. Bate Papo is based out of Massachusetts and their magazine was recommended by a key informant while advisors knew of it. Host: Shirley Nigri Farber 781-975-1009
- *The Portuguese Channel*, community cable channel 20, is produced at: 1501 Acushnet Avenue, New Bedford, Massachusetts 02740. (508) 997-3110.
- *RTP International* is a global Portuguese-language satellite programming, offered both directly as a free service through cable and by satellite services on the DISH network. Also with internet, radio, text-messaging and other services, it draws programming from Massachusetts immigrant communities. <http://tv1.rtp.pt/EPG/tv/>

<sup>10</sup> It may be noted that the Cape Cod Chamber of Commerce provides translated information for foreign visitors to the Cape: See: <http://www.capecodchamber.org/?lang=pt-br>

### *Local Distribution*

- Postings (see communication channels, above)
- Create translated Reserve brochures (Portuguese and Spanish) for distribution in the community.
- Distribute to households new culturally and linguistically tailored guidance, such as clear information on laws, regulations, and important environmental practices for new residents; and places to find environmentally-conscious services for all residents.

### *Radio*

Radio shows were mentioned as a good outreach medium; holding discussions on radio shows about the environment was suggested as a potentially valuable approach. The local reach of shows in the watershed is extremely limited. That said, radio shows are also broadcast from the Internet.

- WJFD-FM (97.3) Radio Globo. 270 Union Street, New Bedford, Massachusetts 02740. Office: (617) 997-2929. Service reaches Falmouth, but coverage of Cape news is uncommon. <http://www.wjfd.com/> Jorge Morais, [jorge@wjfd.com](mailto:jorge@wjfd.com) Spoke 8/21 with Jorge who said they would like to learn more about the project.
- WKKL, (90.7) Is a public radio offered by Cape Cod Community College which has Portuguese shows on Sundays recommended by the Cape Cod Immigrant Center. Broadcast from West Barnstable, it has weak coverage in Mashpee and East Falmouth. 508-375-4030; <http://www.geocities.com/wkkl247/>
- Assistencia (radio service unavailable on Cape, but website) Carlos Da Silva • 617-773-2006. Office: 617-884-4500 • Studio: 617-884-1230, 90 Everett Ave., Chelsea, MA 02150. Education/service focused. [info@assistenciatotal.com](mailto:info@assistenciatotal.com) | [www.assistenciatotal.com](http://www.assistenciatotal.com) E-mail PSA requests to Charlie Rodriguez: [CharlieRod57@hotmail.com](mailto:CharlieRod57@hotmail.com)
- Radio WLYN AM 1360 (Service unavailable on Cape, but website) talk-radio show that provides information about immigration, work, safety, and health for the Brazilian community in Massachusetts. The radio show is always looking for interaction with the community and new topics of interest. Fausto Da Rocha • 617-783-8001 ext. 7, 14 Harvard Av. 2nd floor, Allston, MA 02134 [fausto@braziliancenter.org](mailto:fausto@braziliancenter.org) | [www.braziliancenter.org/](http://www.braziliancenter.org/) | [www.caminhonet.com](http://www.caminhonet.com)

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## Conclusions

Use of a community-based, participatory research strategy helped advance the assessment and its objectives. Meeting with the professional and community advisory groups early in the assessment, and maintaining ongoing communications, proved to be important in building collaborative partnerships with Cape Cod immigrant communities. Engagement in the study from the start established important credibility and trust as well as investment in the goals of the assessment. It also set the tone for a mutual exchange of information and learning that was respectful of the expertise of community residents as well as that of Reserve staff. Holding meetings at the Reserve, in its beautiful boathouse overlooking the water, was seen by participants as a highly valuable way to introduce the Reserve's offerings of resources.

Even early into the project, our eyes were opened to many new insights and opportunities. Immigrant residents have been enthusiastic in offering support out of a true love for Cape Cod's special environment that is now their home. Many have developed an extensive commitment to environmental protection through the practices they adopted in their countries of origin. Brazilian immigrants, for example, are used to extensive recycling programs and are eager to promote greater recycling on the Cape.

New immigrants; however, like many other Cape Cod residents may not realize the fragility of Cape Cod's coastal water resources and need information on practices they can use at home and work to safeguard the environment.

Several valuable suggestions were made to make the Reserve itself more inclusive and accessible. In addition to events at the Reserve, programs offered in community settings (such as area churches, the Falmouth Brazilian Coffee Store, ESOL classes, and the Family Service Center) were requested. Unfortunately, members of the Cape immigrant community have experienced mounting tensions in recent years, and partially as a consequence they have developed distrust in persons and institutions with whom they are not familiar. The offering of outreach and education services targeted to these communities was seen as highly valuable and the use of trusted community and service leaders to introduce them to the Reserve and its programs was considered an important strategy to overcome many barriers. Innovative ideas to build environmental peer leadership among youth and adults were proposed.

## Acknowledgements

We are indebted to the many individuals who shared their time and knowledge very generously to help in this assessment. Vision and leadership for this project was provided by Joan Muller, Education Coordinator for the Waquoit Bay National Estuarine Research Reserve. The project greatly benefited from the extraordinary support of the ACCESS ESOL program, under the leadership of Terri Huff – Director of Community Programming. ACCESS engaged their staff, teachers, and students to participate at all stages of this effort including the recruitment of focus group participants and community leader advisor. We extend our appreciation to Barnstable County for providing a staff person to serve on the PAG and for access to helpful population data. Connie Souza (also a member of the Immigrant Leader Advisory Group) served as a focus group leader, while Nicholas Radcliffe and John LeVar provided materials translation. JSI staff members for the project included Terry Greene, Gretchen Latowsky, and Thomas Mangione, while Lauren Alexanderson provided layout and design.

Special thanks to all who participated in the professional and immigrant leader advisory groups for their direction, insights, and sharing of resources.

We are greatly appreciative of the many Cape Cod residents who shared their thoughts and experiences, especially in light of how truly precious we have learned that their time is. Not only are we grateful for their efforts on this project, but also for the commitment to families, community, and the future of Cape Cod. We look to their leadership in helping fulfill the creative and promising ideas that were generated in this process.

## Attachments:

- Survey results
- ESOL demographic chart
- Project materials
- Social Marketing Guide
- Select publications
- Revised PowerPoint
- Interpretation and translation services



## Waquoit Bay NERR Underserved Audience Assessment—Key Informants

### Immigrant Health and Service Providers:

- Cape Cod Immigrant Center (CCIC) (conducted April 3, 2008)
  - Ingrid Muzy Murray, CCIC President; Social Worker for the Cape Cod Hospital in Hyannis
  - Milene Chioatto, CCIC Vice President; Program Coordinator for the Specialty Network for the Uninsured. A Falmouth resident who immigrated from Brazil.
- Terri Huff, Community Planner, Adult Collaborative of Cape Cod for Education and Support Services (ACCESS) ESOL
- Carey Reed: New England Literacy Center/State Adult Basic Education Services
- Brenda Swain, Executive Director, Falmouth Family Service Center. 508-548-2794 (conducted April 14, 2008)
- Fausto da Rocha, Executive Director, Brazilian Immigrant Center. (617) 783-8001, fausto@braziliancenter.org

### Schools:

- Brother George Spivey, Town of Falmouth Equity/Affirmative Action Officer (Conducted April 14, 2008.)

### Resident Leaders:

Community Leaders participating in the Immigrant Leaders Advisory Group (see listing, page 28).

### Religious Institutions:

- World Revival Church Assembly of God which meets Thursdays and Sundays for services in Portuguese with Brazilian residents at the Church of the Nazarene. 292 Brick Kiln Rd, E. Falmouth, MA 02536 (508-540-2150) Pastor Robson Rezende – 508-560-1382 and his parishioner (Joan Muller also had a telephone conversation with Pastor Warren (Buddy) Washburn)
- St. Patrick's Parish (has a Portuguese Mass). Father Messias Albuquerque, 508-292-9135; Falmouth, MA (attended review of preliminary findings)

### Business Owners:

- Owner, Brazilian Coffee Store, 72 Davis Straits, Falmouth, MA. 508-457-6688.

### Media:

- RefletirNews (in Portuguese), 706 Mystic Ave, Somerville, MA 02145, 617-625-4598, refletir.news@gmail.com (distributed free at Hyannis Brazilian market)
- Brief conversation with Bate Papo, magazine, TV show, and Internet Site for Portuguese speakers Editor & Publisher: Shirley Nigri Farber 781-975-1009. www.BatePapomagazine.com

## Cultural Assessment Professional Advisory Group:

- *Milene Chioatto*, CCIC Vice President; Social worker for the Community Health Center of Cape Cod in Mashpee; and Program Coordinator for the Specialty Network for the Uninsured
- *Terri Huff*, Director of Community Planning, Adult Collaborative of Cape Cod for Education and Support Services (ACCESS) ESOL program
- *Peter D. Kirwin*, Director of Human Services, Falmouth Human Services Department
- *Isadore (Dewey) Mete*, Department of Conservation and Recreation Diversity Committee, Horse shoe Neck Lead Beach Supervisor
- *Ingrid Muzy Murray*, CCIC President; Social Worker for the Cape Cod Hospital in Hyannis
- *Warren Smith*, Data Analyst, Barnstable County Department of Human Services

## Cultural Assessment Immigrant Leader Advisory Group:

- *Connie Souza*, Catholic Social Services Catholic Social Services: participated in the ILAG and helped interpret for the May focus group.
- *Susan Saia*, ACCESS Mashpee Teacher
- *Feber Sabarensse*, LSW, AIDS Support Group of Cape Cod
- *Maryann Hendrickson*, Mashpee Site ACCESS ESOL Teacher
- *Neucemari Smedley*, Academic Bilingual Advisor (Portuguese) and Administrative Interpreter/Translator; ACCESS Program
- *Carmen Lebron*, Bilingual Staff (Spanish/Guatemalan) at Cape Cod Community College (CCCC) and President of Massachusetts Alliance for Adult Literacy (Mass ALL) a student literacy/health leadership organization.
- *Father Messias Albuquerque*, St. Patrick's Church, Falmouth

## Advanced ESOL Students:

- *Clandia A.*, ACCESS
- *Ana Claudia V.*, ACCESS
- *Maria Z.*, ACCESS
- *Katherine C.*, ACCESS
- *Sonia Q.*, ACCESS
- *Kathy B.*, ACCESS
- *Mardi M.*, ACCESS
- *Zakel M.*, ACCESS



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